

Claims**WHAT IS CLAIMED IS:**

1. A receptacle electrical connector comprising an insulative housing having at least one conductive receptacle contact and a plurality of conductive plug contacts, each
5 said plug contact having a cable plug projection for mating with a corresponding removable contact of an AC power cable.
2. The connector of claim 1, each said plug contact further having a pair of spaced walls forming a plug contact receiving space therebetween.
3. The connector of claim 2, wherein said at least one conductive receptacle
10 contact has a pair of spaced walls forming a plug contact receiving space therebetween.
4. The connector of claim 1, wherein the cable plug projection comprises a pair of opposed and spaced apart cantilever beams.
5. The connector of claim 4, wherein each of the cantilever beams has an arc to impart a spring-like effect of said cable plug projection when it is mated with a
15 corresponding contact of an AC power cable.
6. The connector of claim 1, further comprising a shroud enclosing therein said cable plug projection of said plurality of conductive plug contacts.
7. The connector of claim 1, wherein said insulative housing further includes at least one signal contact therein.
- 20 8. A conductive plug contact having a cable plug projection for mating with a corresponding contact of an AC power cable wherein the cable plug projection comprises a pair of opposed and spaced apart cantilever beams and wherein each of said cantilever

beams has an arc to impart a spring-like effect of said cable plug projection when it is mated with a corresponding contact of an AC power cable.

9. The conductive plug contact of claim 8, further having a pair of spaced walls forming a plug contact receiving space therebetween.

5 10. A receptacle electrical connector comprising an insulative housing having a plurality of conductive plug contacts, each said plug contact having a cable plug projection for mating with a corresponding contact of an AC power cable and further having a pair of spaced walls forming a plug contact receiving space therebetween.

10 11. The connector of claim 10, wherein the cable plug projection comprises a pair of opposed and spaced apart cantilever beams.

12. The connector of claim 11, wherein each of the cantilever beams has an arc to impart a spring-like effect of said cable plug projection when it is mated with a corresponding contact of an AC power cable.

13. An electrical connection system comprising:

15 a receptacle electrical connector comprising an insulative housing having a plurality of conductive plug contacts, each said plug contact having a cable plug projection for mating with a corresponding contact of an AC power cable and further having a pair of spaced walls forming a plug contact receiving space therebetween;

20 a cover enclosing said insulative housing, said cover having a groove around the perimeter thereof; and

a mounting bracket having portions thereof inserted into said groove such that said insulative housing can float within said mounting bracket.

14. An electrical connector comprising an insulative housing having at least one conductive receptacle contact and a corresponding conductive plug contact therein, each said plug contact further comprising a cable plug projection for mating with a corresponding removable contact of an AC power cable.

5 15. The connector of claim 14, wherein said at least one receptacle contact is unitary with said corresponding plug contact.

16. A receptacle electrical connector comprising an insulative housing having a plurality of conductive plug contacts, each said plug contact having a cable plug projection for mating with a corresponding portion of a bus bar power supply and further having a pair of spaced walls forming a plug contact receiving space therebetween, said cable plug projection comprising a pair of opposing clip side walls for clipping said cable plug projection onto the corresponding portion of a bus bar.

17. The connector of claim 16, wherein the cable plug projection further comprises tab elements joined to each respective clip side wall by an arcuate elbow.

18. The connector of claim 17, wherein the distance between the arcuate elbows associated with the opposing clip side walls is slightly less than the thickness of the corresponding portion of the bus bar to which the cable plug projection is mated.

19. The connector of claim 16, wherein said plurality of conductive plug contacts are arranged in said housing such that each said cable plug projection is adapted for mating with a corresponding arm of a u-shaped projection of the bus bar,.

20. A conductive plug contact having a cable plug projection for mating with a corresponding portion of a bus bar power supply and further having a pair of spaced walls forming a plug contact receiving space therebetween, said cable plug projection

comprising a pair of opposing clip side walls for clipping said cable plug projection onto the corresponding portion of a bus bar.

2025 RELEASE UNDER E.O. 14176